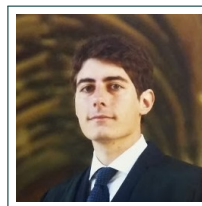


Edoardo M. Ponti

Curriculum Vitae

St John's College
Cambridge CB2 1TP, UK
☎ (+44) 7403197323
✉ ep490@cam.ac.uk



Education

- October 2016 **Ph.D. Candidate in Computational Linguistics**, Language Technology Lab, University of Cambridge (United Kingdom).
- current Thesis title: *Gradient Typology: The Inductive Bias of Neural Models Towards Language*.
- October 2014 **Master's in Theoretical and Applied Linguistics**, University of Pavia (Italy).
- July 2016 Thesis title: *Identifying Causal Relations between Events with Artificial Neural Networks*. 110/110 *summa cum laude* and publication recommended (extremely rare).
- October 2011 **Diploma in Human Sciences**, Neuroscience and Teoretical Syntax, Institute of
- July 2016 Advanced Study (IUSS), Pavia (Italy).
Highest grade and publication recommended.
- 2014 and **Erasmus exchanges**, at the University of Helsinki, Finland, and the University of
2016 Cambridge, United Kingdom.
- October 2011 **Bachelor's Degree in Modern Literature**, University of Pavia (Italy).
- July 2014 Thesis title: *Partitive subject in Finnish*. 110/110 *summa cum laude*.

Publications

Peer-Reviewed Conference Papers

1. Ponti, Edoardo Maria, Ivan Vulić, Ryan Cotterell, Roi Reichart, Anna Korhonen. 2019. Towards Zero-shot Language Modeling. In *Proceedings of EMNLP 2019*.
2. Ponti, Edoardo Maria, Ivan Vulić, Goran Glavaš, Roi Reichart, Anna Korhonen. 2019. Cross-lingual Semantic Specialization via Lexical Relation Induction. In *Proceedings of EMNLP 2019*.
3. Lauscher, Anne, Ivan Vulić, Edoardo Maria Ponti, Anna Korhonen, and Goran Glavaš. 2019. Informing Unsupervised Pretraining with External Linguistic Knowledge. arXiv.
4. Kamath, Aishwarya, Jonas Pfeiffer, Edoardo Maria Ponti, Goran Glavaš, and Ivan Vulić. 2019. Specializing Distributional Vectors of All Words for Lexical Entailment. In *Proceedings of RepL4NLP-2019*.
5. Ponti, Edoardo Maria, Ivan Vulić, Goran Glavaš, Nikola Mrkšić and Anna Korhonen. Adversarial Propagation and Zero-Shot Cross-Lingual Transfer of Word Vector Specialization. In: *Proceedings of EMNLP 2018*.
6. Gerz, Daniela, Ivan Vulić, Edoardo Maria Ponti, Roi Reichart and Anna Korhonen. On the Relation between Linguistic Typology and (Limitations of) Multilingual Language Modeling. In: *Proceedings of EMNLP 2018*.
7. Ponti, Edoardo Maria, Roi Reichart, Anna Korhonen and Ivan Vulić. 2018. Isomorphic Transfer of Syntactic Structures in Cross-lingual NLP. In: *Proceedings of ACL 2018*.

8. Ponti, Edoardo Maria, Ivan Vulić and Anna Korhonen. 2017. Decoding Sentiment from Distributed Representations of Sentences. In: *Proceedings of *SEM 2017*. 30 July - 4 August 2017, Vancouver (British Columbia, Canada).
9. Ponti, Edoardo Maria and Anna Korhonen. 2017. Event-Related Features in Feedforward Neural Networks Contribute to Identifying Implicit Causal Relations in Discourse. In: *Proceedings of the Workshop on Linking Models of Lexical, Sentential and Discourse-level Semantics*. 3-7 April 2017, Valencia (Spain).
10. Ponti, Edoardo Maria and Marco Passarotti. 2016. Diversity Makes Composition. A Slower-paced and Reliable Parser for Latin. In *Proceedings of the Conference on Language Resources and Evaluation (LREC'16)*. 23-28 May 2016, Portorož (Slovenia).
11. Ponti, Edoardo Maria. 2016. *Divergence from Syntax to Linear Order in Ancient Greek Lexical Networks*. In *Proceedings of The 29th International Florida Artificial Intelligence Research Society Conference (FLAIRS 29)*. 16-18 May 2016, Key Largo (Florida, USA).

Journal Articles

1. Ponti, Edoardo Maria, Helen O'Horan, Yevgeni Berzak, Ivan Vulić, Roi Reichart, Thierry Poibeau, Ekaterina Shutova, and Anna Korhonen. 2019. Modeling language variation and universals: A survey on typological linguistics for natural language processing. *Computational Linguistics*, 1-43.
2. Gerz, Daniela, Edoardo Maria Ponti, Ivan Vulić, Jason Naradowsky, Roi Reichart, and Anna Korhonen. 2018. *Language Modeling for Morphologically Rich Languages: Character-Aware Modeling for Word-Level Prediction*. *Transactions of the Association for Computational Linguistics (TACL)* 6:451-465.
3. Ponti, Edoardo Maria and Silvia Luraghi. 2018. *Non-configurationality in diachrony: Correlations in local and global networks of Ancient Greek and Latin*. *Diachronica* 35(3).
4. Ponti, Edoardo Maria, Elisabetta Ježek and Bernardo Magnini. 2017. *Distributed Representations of Lexical Sets and Prototypes in Causal Alternation Verbs*. *Italian Journal of Computational Linguistics*, 3.1.

Book Editor

1. Ponti, Edoardo Maria and Marco Budassi (eds.). 2016. *Compter parler soigner. Between Linguistics and Artificial Intelligence*. Pavia University Press, Pavia.

Job Experience

- Jul - Sep 2019 **Internship in AI / ML at Apple**, Cupertino (California, U.S.).
International features of Siri.
- Oct - Dec 2015 **Internship at the Bruno Kessler Foundation (FBK)**, Trento (Italy).
Topology of word embeddings of lexical sets.

Research Experience

- Jan - Feb 2016 **Internship at CLTL, Vrije Universiteit**, Amsterdam (Netherlands).
Part of the **ERC-funded NewsReader project**. Devised neural approaches to indentify causal relations in discourse and guide artificial storytelling.
- Feb - May 2015 **Internship at CIRCSE, University of the Sacred Heart**, Milano (Italy).
Streamlined ensemble methods to parse the first digital corpus in history (*Index Thomisticus*).

Teaching Experience

Supervisor

- Oct 2017 - **Computational Linguistics**, University of Cambridge (U.K.).
May 2019 Department of Theoretical and Applied Linguistics. For two years: A.Y. 17/18 and 18/19

Demonstrator

- Oct 2017 - **Machine Learning and Real-world Data**, University of Cambridge (U.K.).
May 2018 Computer Lab, Faculty of Computer Science and Technology.

Thesis Advisor

Master's thesis, Jia Wan, Huilei Wang. **Bachelor's thesis**: Bonamy Meath-Baker.
University of Cambridge

Summer Schools

- Jul 2017 **Generative Lexicon: Integrating Theoretical and Distributional Methods**,
Preparation of ESSLLI 2017 course material, Toulouse, France.

Tutorials

- Nov 2019 **Semantic Specialization of Distributional Word Vectors**, Tutorial at EMNLP-IJCNLP 2019, Hong Kong, China.

Conference Organization

- Aug 2019 **TyP-NLP - Typology for Polyglot Natural Language Processing**, Workshop
at ACL 2019, Firenze, Italy.
Feb 2019 **St John's College Graduate Symposium**, Cambridge (U.K.).

Service

Publicity/Sponsorship Chair, CoNLL 2018.

Program Co-Chair Assistant, ACL 2019.

Reviewer, *ACL 2018, EMNLP 2018, NAACL 2019, *SEM 2019, ACL 2019, EMNLP 2019, AAAI 2019, Natural Language Engineering, Journal of Historical Linguistics.*

Funds and Awards

- Aug 2019 **Best Paper Award at Repl4NLP 2019**.
For the paper "Specializing Distributional Vectors of All Words for Lexical Entailment",
co-written with Aishwarya Kamath, Jonas Pfeiffer, Goran Glavaš and Ivan Vulić
- Mar 2019 **Google Faculty Research Award**.
Project "Automatic Induction and Adaptation of Syntactic Structures for Improved Cross-
Lingual NLP", co-written with Anna Korhonen (PI), Roi Reichart, and Ivan Vulić
\$60,841 USD
- Oct 2016 - **ERC studentship**, University of Cambridge (United Kingdom).
- June 2019 Project LEXICAL: Lexical Acquisition across Languages (code GZ08825).
£21K/year for 3 years.

- 2016 **Self-placed Fulbright Scholarship**, U.S.A.
Offer of a \$38K grant and \$1.1K travel allowance (declined).
- Dec 2016 **Young researcher best paper**, Naples (Italy).
3rd Italian Conference of Computational Linguistics.
- Sep 2011 - **Award from the Institute for Advanced Study**, Pavia (Italy).
- Jul 2016 Around €2.5K awarded annually (for 5 years) to students who fulfil merit criteria.
- 2014 **Scholarship from Collegio Ghislieri**, Pavia (Italy).
One-year free board and lodging for the best student in contest (score 78/80).

Technical Skills

- Programming languages: Python, C++, R
- Deep learning libraries: PyTorch, TensorFlow, Theano

Linguistic Skills

Italian	Native speaker	
English	Fluent	<i>IELTS 8</i>
Finnish	Intermediate	
German	Beginner	<i>Start Deutsch 2 - Goethe-Institut</i>

References

Prof. Anna Korhonen, Professor of Computational Linguistics, Co-Director of the Language Technology Lab, University of Cambridge. alk23@cam.ac.uk

Prof. Roi Reichart, Assistant Professor at the faculty of Industrial Engineering and Management of the Technion - Israel Institute of Technology. roiri@ie.technion.ac.il